REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated May 2, 2008. Reconsideration and allowance of the application in view of the remarks to follow are respectfully requested.

Claims 1-27 are currently pending in the Application. Claims 1, 8, 23 and 26 are independent claims.

In the Office Action, claims 1-5 and 23-25 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,947,905 to Hadjicostis ("Hadjicostis") in view of U.S. Patent No. 6,049,958 to Eberle ("Eberle"). In addition, Claims 6-22 and 26-27 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Hadjicostis in view of Eberle and further in view of U.S. Patent No. 7,022,080 to Marian ("Marian"). The rejection of claims 1-27 is respectfully traversed. It is respectfully submitted that claims 1-27 are allowable over Hadjicostis in view of Eberle alone, and in view of Marian for at least the following reasons.

It is undisputed that Hadjicostis fails to disclose or suggest "the use of one common surface of the integrated surface for placement of both the acoustic elements and connection means ..." (See, Office Action, page 4, second full paragraph.) In the Response to Arguments on page 6 of the Office Action, it is stated

that Eberle "has been added to provide for the deficiencies of Hadjicostis". Specifically, the Office Action states (on page 4) that Eberle "discloses the use of an acoustic stack and connection elements on the same surface of an integrated circuit". While Eberle is relied on for showing that which is not disclosed or suggested by Hadjicostis, it is respectfully submitted that reliance on Eberle is misplaced.

While the section of Eberle cited in the Office Action, namely Col. 2, line 65 - Col. 3, line 20, generally describes construction of a flexible circuit, integrated circuit and ultrasound transducers, there is nothing in the cited section of Eberle or any section of Eberle for that matter, that discloses or suggests "connection sites for said first and second connection means and said acoustic elements being arranged on a common surface of said integrated circuit", as for example recited in claim 1 and as contended in the Office Action. In fact, FIG. 1 of Eberle unquestionably shows that the transducer elements (8) are positioned away from the IC chips (6).

In view of the above, it is respectfully submitted that the ultrasonic transducer of claim 1 is not obvious in light of Hadjicostis in view of Eberle. For example, Hadjicostis in view of

Eberle does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis provided) "first connection means for connecting said acoustic elements to said integrated circuit; and second connection means for connecting said integrated circuit to electrical transmission lines, connection sites for said first and second connection means and said acoustic elements being arranged on a common surface of said integrated circuit" as recited in Claim 1, and as similarly claimed in claims 8 and 23.

It is further respectfully submitted that Hadjicostis in view of Eberle and Marian does not disclose or suggest, a method for manufacturing an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "arranging an acoustic assembly on a flexible circuit that extends along a first axis; ... and bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body with the acoustic assembly being spaced from the electronic components along a second axis that extends substantially perpendicular to the first axis and both the acoustic assembly and the electronic components are positioned, with respect to each other, along the second axis" as recited in Claim 26.

It is undisputed that Hadjicostis in view of Eberle fails to disclose a flexible circuit that ". . . bends at least at a perpendicular angle to define some cavity which contains thermally conductive elements . . ." (See, Office Action, page 5.). The Office Action relies on Marian (FIG. 2, Col. 3, line 30 through Col. 4, line 45 and Col. 7, line 35 through Col. 8, line 12) as disclosing "the use of a flexible circuit having a least a perpendicular bend which in part creates a cavity around thermally conductive elements connected to the circuit . . . ". However, it is respectfully submitted that reliance on Marian, for supplying that which is admitted in the Office Action as deficient in Hadjicostis in view of Eberle, is misplaced.

In particular, FIG. 2 of Marian shows transducer elements (25) positioned on a mechanical backing block (90), which is the mechanical foundation for the transducer array (25) (see, Col. 3, lines 38-41). The transducer elements (25) are shown connected to a flexible circuit (100) that generally extends away from the transducer elements. FIG. 2 also shows electronic (multiplexer) components (230) that are bonded to separate printed wiring boards (110). Moreover, as acknowledged in the Office Action (see, Office

Action, page 5), Marian merely shows that the flexible circuit (100) is bent perpendicular, namely 90 degrees.

Accordingly, it is respectfully submitted that Hadjicostis in view of Eberle in further view of Marian does not disclose or suggest, a method for manufacturing an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "arranging an acoustic assembly on a flexible circuit that extends along a first axis; ... and bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body with the acoustic assembly being spaced from the electronic components along a second axis that extends substantially perpendicular to the first axis and both the acoustic assembly and the electronic components are positioned, with respect to each other, along the second axis" as recited in Claim 26. In fact, the Office Action fails to explain where or how Marian teaches a "thermally conductive body" much less bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body as recited in claim 26.

Based on the foregoing, the Applicants respectfully submit that independent Claims 1, 8, 23 and 26 are patentable over

Hadjicostis in view of Eberle alone, and in view of Marian and notice to this effect is earnestly solicited. Claims 2-7, 9-22, 24-25 and 27 respectively depend from one of Claims 1, 8, 23 and 26 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By _____

Gregory L. Thorne, Reg. 39,398
Attorney for Applicant(s)
July 24, 2008

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101